

Genuine Aircraft Hardware Co. Tyco AMP®

PIDG (Pre-insulated Diamond Grip) Terminal

Kits Available

Here is a pre-insulated terminal designed for complete and uniform reliability in the most difficult circuit environments. Each PIDG Terminal consists of a tin plated copper body or a tin plated phosphor bronze body for spring spades with a specially designed copper sleeve and insulation sleeve fitted over the terminal barrel. The design of the tool dies and the construction of the terminal insures uniform insulation thickness under crimping pressure, transmitting this pressure evenly to the center of the crimp area.

The AMP Mated Tool/Terminal Concept

AMP compression crimping produces crimps for a given size wire and terminal that are precisely alike in appearance and performance. This is a calculated result made possible by designing the terminal and the crimping tool as precisely matched devices. The dies are precision-engineered from the finest hard-metal alloys. Crimping pressure is controlled by a ratchet device on the hand tool or a corresponding pre-calibration in the crimping jaws of AMP automated crimping machines.

The Crimp

Crimping pressure can neither overstress nor understress the terminal barrel — machined dies fully bottom to the precise crimp height.

The resulting termination is free of contamination, is extremely resistant to shock and critical environments, and its tensile strength approaches that of the wire itself.

PIDG Terminals meet or exceed the requirements of MIL-T-7928, Type II, Class 1 and 2

Refer to **AMP Qualified Products for Military Application**, Catalog 73-159 for Military Specification Number to AMP part Number cross reference.

Nylon Insulation: Nylon sleeves assures high dielectric strength. See page 19 for PVF₂ Radiation Resistant Insulation.

Color Coding. Terminal insulation is color-coded by wire range to eliminate errors during installation. For wire sizes 26-22, yellow; 24-20 natural (clear); 22-16, red; 16-14 blue; 12-10 yellow and 16-14 H.D., yellow with black stripe.

Basic Terminal Material. The basic terminal is constructed of fine grade high conductivity copper per QQ-C-576 and tin-plated per MIL-T-10727. Basic material for Spring Spade Tongue Terminals is phosphor bronze per QQ-B-750 and tin-plated per MIL-T-10727. AMP's special plating process creates durable corrosion resistance to salt spray and most chemical fumes.

Copper Sleeve. The specially designed copper sleeve, fitted over the terminal barrel, provides circumferential insulation support to the wire and allows the wire to be bent in any direction, without fraying the wire's insulation or breaking the conductor.

Serrations. Serrations inside barrel provide maximum contact and tensile strength after crimping.

Funnel Ramp Entry. Guarantees against a turned back strand and permits rapid wire insertion during high speed production.

Temperature Rating: 105°C Max.

AMP PIDG Terminals (Use PIDG Tooling)

AMP Wire Range	UL Listed	LR7189 Certified
22-16	22-16 Solid or Stranded	
16-14	16-14 Solid or Stranded	300 V Max., 105°C Max.
12-10	12-10 Solid or Stranded	

Note: 22-16 splices are stamped 22-18 in accordance with MIL-T-7928.

*UL & CSA — Nylon

AMP PIDG Nylon Butt Window Splice (Use PIDG Tooling)

AMP Wire Range	UL Listed	LR7189 Certified
22-16	22-16 Stranded or Solid	300 V Max., 105°C Max.
16-14	16-14 Stranded or Solid	300 V Max., 105°C Max.
12-10	12-10 Stranded or Solid	300 V Max., 105°C Max.

Note: 22-16 splices are stamped 22-18 in accordance with MIL-T-7928.

*Over size expansions are provided in vinyl insulation only.

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SOLISTRAND Terminal

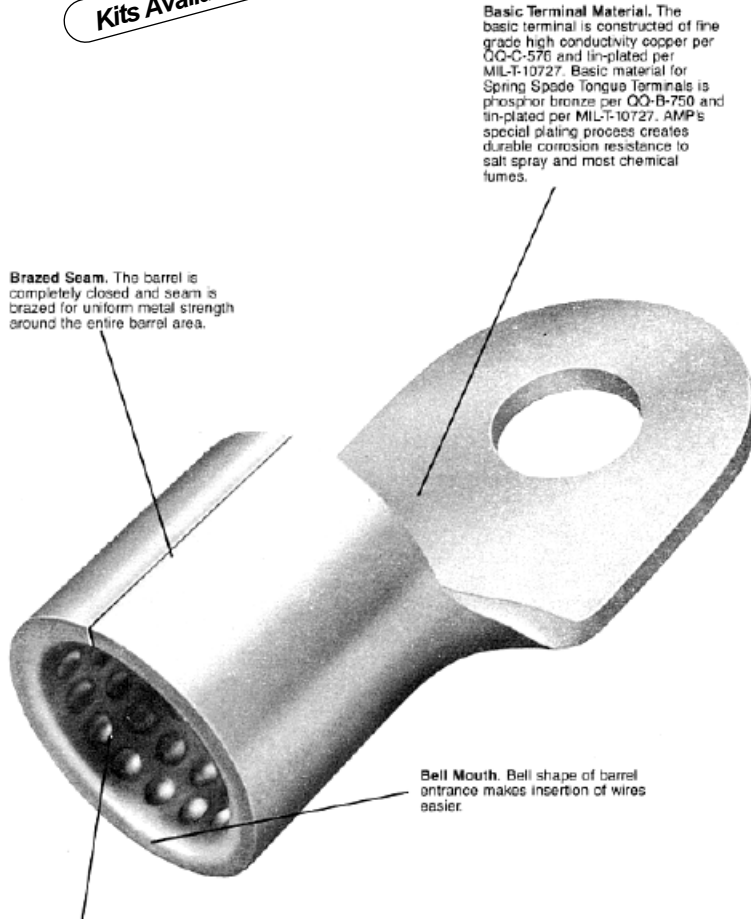
SOLISTRAND terminals and splices are especially designed to terminate solid and stranded wire, irregular shaped conductors, and combination of these — still retaining the superior performance characteristics of single-purpose terminals and splices. Because AMP matches the terminal to the tool each termination is uniform making quality control easy and performance consistent. Corrosion resistance, vibration resistance and tensile strength of these terminals and splices are well within the limits of commercial and military specifications. The SOLISTRAND line includes parallel, and butt splices, and ring, spade, hooked and flanged spade terminals in sizes from 26 AWG through 2/0 AWG.

The Crimp

The "W" Crimp is one of several time-proven crimp types developed by AMP. It is not just a "kink" in a metal barrel; not something pinched over the electrical wire ends. The "W" Crimp is actually two longitudinal crimps applied with precisely controlled pressure so that the conductor within the barrel flows together into the dimples or serrations of the terminal barrel creating one homogeneous mass of metal. The two indents also help to center conductors within the barrel for uniform crimping of the barrel around the wire. Furthermore, the "W" Crimp permits the use of a shorter terminal barrel, an excellent feature for confined area termination.

The "W" Crimp creates terminations of optimum electrical properties and is completely reliable, giving long service in punishing environments.

Kits Available



Brazed Seam. The barrel is completely closed and seam is brazed for uniform metal strength around the entire barrel area.

Basic Terminal Material. The basic terminal is constructed of fine grade high conductivity copper per QQ-C-576 and tin-plated per MIL-T-10727. Basic material for Spring Spade Tongue Terminals is phosphor bronze per QQ-B-750 and tin-plated per MIL-T-10727. AMP's special plating process creates durable corrosion resistance to salt spray and most chemical fumes.

Bell Mouth. Bell shape of barrel entrance makes insertion of wires easier.

Dimples or Serrations. Inner surface either dimpled or serrated for optimum tensile strength and maximum electrical contact area after crimping.

SOLISTRAND Terminals meet or exceed the requirements of MIL-T-7928, Type I, Class 1 and 2.

Refer to AMP Qualified Products for Military Application, Catalog 73-159 for Military Specification Number to AMP Part Number cross reference.

Temperature Rating: 170°C Max.

SOLISTRAND Terminals and Splices (Use SOLISTRAND Tooling)

AMP Wire Range	UL Listed	SAE Certified
22-16 Solid or Stranded	22-16 Solid or Stranded	22-16 Solid or Stranded
16-14 Solid or Stranded	16-14 Solid or Stranded	16-14 Solid or Stranded
12-10 Solid or Stranded	12-10 Solid or Stranded	12-10 Solid or Stranded
8 thru 2/0 Solid or Stranded	8 thru 2/0 Stranded	8 thru 2/0 Solid or Stranded

Note: 22-16 splices are stamped 22-18 in accordance with MIL-T-7928.

Genuine Aircraft Hardware Co. Tyco AMP®

AMPLI-BOND Terminal

Designed to accommodate wire gauges 8 AWG through 2/0 AWG. AMPLI-BOND terminals were the first large wire terminals to feature vinyl insulation bonded to the terminal sleeve. Terminals for wire sizes 8 AWG through 2/0 AWG meet the requirements of MIL-T-7928, Type II, Class 2.

This is a precision-engineered terminal offering the heavy-duty wire user uniformly high quality connections with permanent insulation support and complete protection against flash over. AMPLI-BOND terminals can be applied in a single effortless operation with the AMP DYNA-CRIMP tool.

Why Bonding?

Terminal insulators must withstand intense crimping pressures necessary for today's high wire-to-terminal contact requirements. Bonded insulation transmits this pressure evenly to the center of the crimp area. A positive bond assures uniform insulation thickness, maintains proper dielectric and tensile values and controls the extrusion of plastic under the crimping dies in the finished connection.

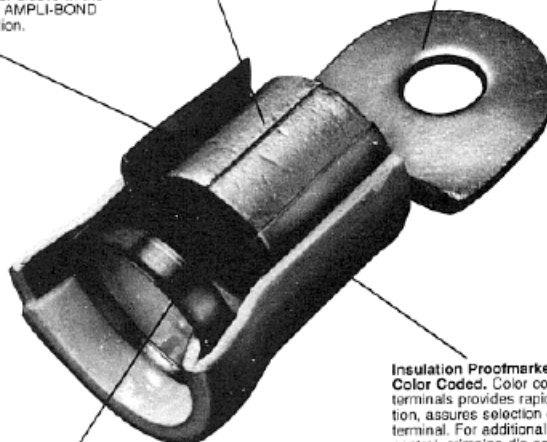
The Crimp

Because both wire and terminal are confined over a greater area during the crimp, a homogeneous mass is achieved. Crimp is applied gradually to encourage full movement of the wire with minimum extrusion. Compare this AMP method of applying pre-insulated solderless terminals to large gauge wires with the cumbersome mechanical fitting, brazing and manual insulating techniques still used in many plants.

Barrel with Brazed Seam, Dimpled Inner Surface. Each AMPLI-BOND terminal body is individually brazed for ruggedness and deformation control during the crimping operation. Dimpling on inner barrel surface provides more contact area of wire to terminal and additional tensile strength.

Basic Terminal Material. The basic terminal is constructed of fine grade high conductivity copper per QQ-C-576 and tin-plated per MIL-T-10727. AMP's special plating process creates durable corrosion resistance to salt spray and most chemical fumes.

Inner Bonding Sleeve. Insulation is bonded to this (QQ-C-576) copper sleeve... the secret of superior AMPLI-BOND terminal construction.



Fully Protected Rear Insulation Support Ring. Separate metal ring provides insulation support to dampen vibration and prevent sharp bends on conductor. Steel (QQ-C-698 or ASTM A109, Tin plated per MIL-T-10727).

Insulation Proofmarked and Color Coded. Color coding of terminals provides rapid identification, assures selection of proper terminal. For additional quality control, crimping die embosses wire size number on insulation. Vinyl insulation extends minimum distance beyond terminal barrel to prevent exposure of conductor during stress and vibration.

Temperature Rating: 105°C Max.

AMPLI-BOND Terminals meet or exceed the requirements of MIL-T-7928, Type II, Class 2.

Refer to AMP Qualified Products for Military Application, Catalog 73-159 for Military Specification Number to AMP Part Number cross reference.

Kits Available

Genuine Aircraft Hardware Co.

Tyco AMP® Ring Terminal Selection Chart

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Kits Available



Please order Ring Terminals by AMP # (in **BOLD** print)

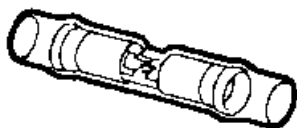
WIRE SIZE	STYLE / COLOR	STUD SIZE	PKG	AMP #	MS PART #
22 - 18 AWG	PIDG / RED	# 4	100	320553	MS25036-148
22 - 18 AWG	PIDG / RED	# 6	100	51863	MS25036-102
22 - 18 AWG	PIDG / RED	# 8	100	320551	MS25036-149
22 - 18 AWG	PIDG / RED	#10	100	36153	MS25036-103
22 - 18 AWG	PIDG / RED	1/4	100	320571	MS25036-150
16 - 14 AWG	PIDG / BLUE	# 4	50	324159	MS25036-152
16 - 14 AWG	PIDG / BLUE	# 6	50	320561	MS25036-106
16 - 14 AWG	PIDG / BLUE	# 8	50	51864-1	MS25036-153
16 - 14 AWG	PIDG / BLUE	#10	50	51864-2	MS25036-108
16 - 14 AWG	PIDG / BLUE	1/4	50	320563	MS25036-154
16 - 14 AWG	PIDG / BLUE	5/16	50	320575	MS25036-109
12 - 10 AWG	PIDG / YELLOW	# 8	25	320568	MS25036-156
12 - 10 AWG	PIDG / YELLOW	#10	25	36161	MS25036-112
12 - 10 AWG	PIDG / YELLOW	1/4	25	320569	MS25036-157
12 - 10 AWG	PIDG / YELLOW	5/16	25	320576	MS25036-113
8 AWG	AMPLI-BOND / RED	#10	10	322128	MS25036-115
8 AWG	AMPLI-BOND / RED	1/4	10	322049	MS25036-116
8 AWG	AMPLI-BOND / RED	5/16	10	322003	MS25036-117
8 AWG	AMPLI-BOND / RED	3/8	10	322004	MS25036-118
8 AWG	SOLISTRAND / NONE	#10	10	31807	MS20659-107
8 AWG	SOLISTRAND / NONE	1/4	10	33461	MS20659-141
8 AWG	SOLISTRAND / NONE	5/16	10	31808	MS20659-108
8 AWG	SOLISTRAND / NONE	3/8	10	33463	MS20659-129
6 AWG	AMPLI-BOND / BLUE	#10	5	322153	MS25036-119
6 AWG	AMPLI-BOND / BLUE	1/4	5	322051	MS25036-120
6 AWG	AMPLI-BOND / BLUE	5/16	5	322006	MS25036-121
6 AWG	AMPLI-BOND / BLUE	3/8	5	322007	MS25036-122
6 AWG	SOLISTRAND / NONE	#10	5	321298	MS20659-130
6 AWG	SOLISTRAND / NONE	1/4	5	33465	NO MS PART #
6 AWG	SOLISTRAND / NONE	1/4	5	321598	MS20659-109
6 AWG	SOLISTRAND / NONE	5/16	5	33466	MS20659-131
6 AWG	SOLISTRAND / NONE	3/8	5	33467	MS20659-110
4 AWG	AMPLI-BOND / YELLOW	1/4	5	322053	MS25036-123
4 AWG	AMPLI-BOND / YELLOW	5/16	5	322010	MS25036-124
4 AWG	AMPLI-BOND / YELLOW	3/8	5	322011	MS25036-125
4 AWG	SOLISTRAND / NONE	1/4	5	31811	MS20659-111
4 AWG	SOLISTRAND / NONE	5/16	5	33470	NO MS PART #
4 AWG	SOLISTRAND / NONE	3/8	5	31812	MS20659-112
2 AWG	AMPLI-BOND / RED	1/4	5	322125	MS25036-126
2 AWG	AMPLI-BOND / RED	3/8	5	322055	MS25036-127
2 AWG	SOLISTRAND / NONE	5/16	5	322870	MS20659-147
2 AWG	SOLISTRAND / NONE	3/8	5	321600	MS20659-114
1/0 AWG	SOLISTRAND / NONE	1/4	5	321866	MS20659-115
1/0 AWG	SOLISTRAND / NONE	5/16	5	321867	NO MS PART #
1/0 AWG	SOLISTRAND / NONE	3/8	5	321868	MS20659-116
1/0 AWG	SOLISTRAND / NONE	1/2	5	36919	NO MS PART #

For Installation Tooling See AMP TOOLING GUIDE in this catalog.

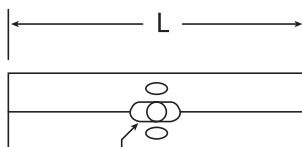
Genuine Aircraft Hardware Co.

Tyco AMP® Splice and Cap Selection Charts

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We supply only Genuine AMP products for your wire termination requirements.



WINDOW SPLICE



Sight Hole
AMP Solistrand
Cable Splice



Kits Available

KNIFE SPLICE / DISCONNECT

Please order Splices by AMP #

WIRE SIZE	STYLE/COLOR	Type	pkg	AMP #	Mil Part #
26 - 24 AWG	PIDG / YELLOW	BUTT SPLICE	25	323994	M7928/5-1
24 - 20 AWG	PIDG / CLEAR	BUTT SPLICE	25	323975	M7928/5-2
22 - 18 AWG	PIDG / RED	BUTT SPLICE	25	320559	M7928/5-3
16 - 14 AWG	PIDG / BLUE	BUTT SPLICE	25	320562	M7928/5-4
12 - 10 AWG	PIDG / YELLOW	BUTT SPLICE	25	320570	M7928/5-5
22 - 18 AWG	PIDG / RED	KNIFE SPLICE	25	32446	NONE
16 - 14 AWG	PIDG / BLUE	KNIFE SPLICE	25	32448	NONE
12 - 10 AWG	PIDG / YELLOW	KNIFE SPLICE	25	35762	NONE

For Installation Tooling see AMP TOOLING GUIDE in this catalog.



Wire Cap

Please order Wire Caps by AMP #

WIRE SIZE	STYLE/COLOR	Type	pkg	AMP #	MS PART#
22 - 18 AWG	PIDG / RED	WIRE CAP	25	328307	MS25274-2
16 - 14 AWG	PIDG / BLUE	WIRE CAP	25	328308	MS25274-3
12 - 10 AWG	PIDG / YELLOW	WIRE CAP	25	328309	MS25274-4

For Installation Tooling see AMP TOOLING GUIDE in this Reference Book